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PAFAH1B1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20863a

Specification

PAFAH1B1 Antibody (N-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	P43034
Other Accession	P63004, Q9GL51, P63005, Q8HXX0, Q9PTR5, P43033
Reactivity	**Human, Mouse, Rat**
Predicted	**Bovine, Chicken, Monkey, Pig**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**46638**

PAFAH1B1 Antibody (N-term) - Additional Information

Gene ID 5048

Other Names
Platelet-activating factor acetylhydrolase IB subunit alpha {ECO:0000255|HAMAP-Rule:MF_03141}, Lissencephaly-1 protein {ECO:0000255|HAMAP-Rule:MF_03141}, LIS-1 {ECO:0000255|HAMAP-Rule:MF_03141}, PAF acetylhydrolase 45 kDa subunit {ECO:0000255|HAMAP-Rule:MF_03141}, PAF-AH 45 kDa subunit {ECO:0000255|HAMAP-Rule:MF_03141}, PAF-AH alpha {ECO:0000255|HAMAP-Rule:MF_03141}, PAFAH alpha {ECO:0000255|HAMAP-Rule:MF_03141}, PAFAH1B1 {ECO:0000255|HAMAP-Rule:MF_03141}

Target/Specificity
This PAFAH1B1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 76-110 amino acids from the N-terminal region of human PAFAH1B1.

Dilution
IHC-P~~1:25
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PAFAH1B1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PAFAH1B1 Antibody (N-term) - Protein Information

Name LIS1

Function Regulatory subunit (beta subunit) of the cytosolic type I platelet-activating factor (PAF) acetylhydrolase (PAF-AH (I)), an enzyme that catalyzes the hydrolyze of the acetyl group at the sn-2 position of PAF and its analogs and participates in PAF inactivation. Regulates the PAF-AH (I) activity in a catalytic dimer composition- dependent manner (By similarity). Required for proper activation of Rho GTPases and actin polymerization at the leading edge of locomoting cerebellar neurons and postmigratory hippocampal neurons in response to calcium influx triggered via NMDA receptors (By similarity). Positively regulates the activity of the minus-end directed microtubule motor protein dynein. May enhance dynein-mediated microtubule sliding by targeting dynein to the microtubule plus end. Required for several dynein- and microtubule-dependent processes such as the maintenance of Golgi integrity, the peripheral transport of microtubule fragments and the coupling of the nucleus and centrosome. Required during brain development for the proliferation of neuronal precursors and the migration of newly formed neurons from the ventricular/subventricular zone toward the cortical plate. Neuronal migration involves a process called nucleokinesis, whereby migrating cells extend an anterior process into which the nucleus subsequently translocates. During nucleokinesis dynein at the nuclear surface may translocate the nucleus towards the centrosome by exerting force on centrosomal microtubules. May also play a role in other forms of cell locomotion including the migration of fibroblasts during wound healing. Required for dynein recruitment to microtubule plus ends and BICD2-bound cargos (PubMed:22956769). May modulate the Reelin pathway through interaction of the PAF-AH (I) catalytic dimer with VLDLR (By similarity).

Cellular Location
Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle {ECO:0000255|HAMAP-Rule:MF_03141}. Nucleus membrane {ECO:0000255|HAMAP- Rule:MF_03141}. Note=Redistributes to axons during neuronal development. Also localizes to the microtubules of the manchette in elongating spermatids and to the meiotic spindle in spermatocytes (By similarity). Localizes to the plus end of microtubules and to the centrosome. May localize to the nuclear membrane.

Tissue Location
Fairly ubiquitous expression in both the frontal and occipital areas of the brain

PAFAH1B1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PAFAH1B1 Antibody (N-term) - Images

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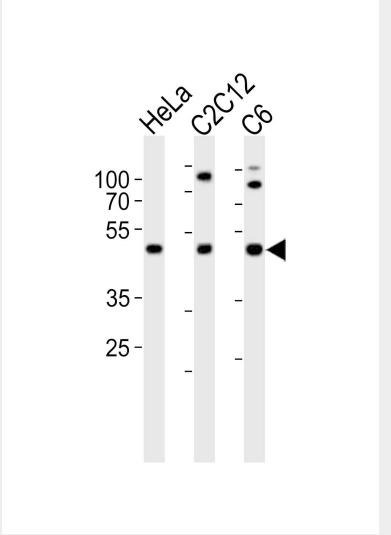
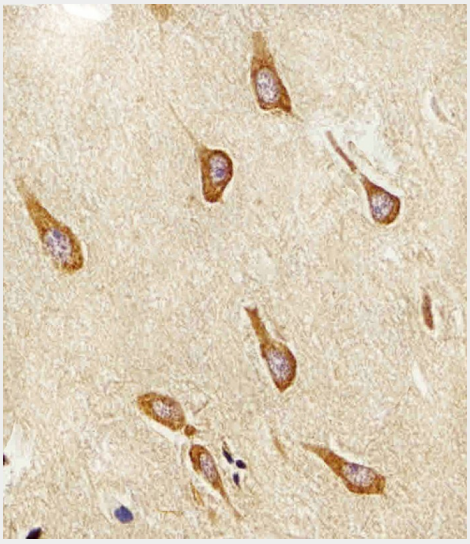


Western blot analysis of lysates from HeLa, mouse C2C12, rat C6 cell line (from left to right), using PAFAH1B1 Antibody (N-term)(Cat. #AP20863a). AP20863a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



Immunohistochemical analysis of paraffin-embedded H. brain section using PAFAH1B1 Antibody (N-term)(Cat#AP20863a). AP20863a was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

PAFAH1B1 Antibody (N-term) - Background

Required for proper activation of Rho GTPases and actin polymerization at the leading edge of locomoting cerebellar neurons and postmigratory hippocampal neurons in response to calcium influx triggered via NMDA receptors. Non-catalytic subunit of an acetylhydrolase complex which inactivates platelet- activating factor (PAF) by removing the acetyl group at the SN-2 position (By similarity). Positively regulates the activity of the minus-end directed microtubule motor protein dynein. May enhance dynein-mediated microtubule sliding by targeting dynein to the microtubule plus end. Required for several dynein- and microtubule-dependent processes such as the maintenance of Golgi integrity, the peripheral transport of microtubule fragments and the coupling of the nucleus and centrosome. Required during brain development for the proliferation of neuronal precursors and the migration of newly formed neurons from the ventricular/subventricular zone toward the cortical plate. Neuronal migration involves a process called nucleokinesis, whereby

migrating cells extend an anterior process into which the nucleus subsequently translocates. During nucleokinesis dynein at the nuclear surface may translocate the nucleus towards the centrosome by exerting force on centrosomal microtubules. May also play a role in other forms of cell locomotion including the migration of fibroblasts during wound healing.

PAFAH1B1 Antibody (N-term) - References

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Lo Nigro C.,et al.Hum. Mol. Genet. 6:157-164(1997).
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Ota T.,et al.Nat. Genet. 36:40-45(2004).